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APPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/757,013	09/757,013 01/08/2001		Jean M. Beaupre	13904	7092	
27777	7590	11/01/2005		EXAMINER		
PHILIP S			ALI, SHUMAYA B			
JOHNSON &		ON HNSON PLAZA	ART UNIT	PAPER NUMBER		
NEW BRUN	ISWICK,	NJ 08933-7003	3743			

DATE MAILED: 11/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		T	Application No.	Applicant(s)					
Office Action Summary			09/757,013	9/757,013 BEAUPRE, JEAN M.					
			Examiner	· Art Unit					
			Shumaya B. Ali	3743					
Period fo	The MAILING DATE of this commun or Reply	ication appea	ars on the cover sheet	with the correspondence a	ddress				
WHIC - Exter after - If NO - Failu Any	ORTENED STATUTORY PERIOD F CHEVER IS LONGER, FROM THE M nsions of time may be available under the provisions SIX (6) MONTHS from the mailing date of this comm period for reply is specified above, the maximum st re to reply within the set or extended period for reply eply received by the Office later than three months and patent term adjustment. See 37 CFR 1.704(b).	IAILING DAT of 37 CFR 1.136( nunication. atutory period will will, by statute, ca	E OF THIS COMMUN a). In no event, however, may apply and will expire SIX (6) Mo tuse the application to become	NICATION. a reply be timely filed  ONTHS from the mailing date of this of ABANDONED (35 U.S.C. § 133).					
Status									
1) 又	Responsive to communication(s) file	ed on 29 July	2005.						
•	· ·		ction is non-final.						
3)	Since this application is in condition	for allowanc	e except for formal ma	atters, prosecution as to th	e merits is				
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.								
Dispositi	on of Claims	•							
4)⊠	P)⊠ Claim(s) <u>1,2,4-13,15 and 16</u> is/are pending in the application.								
	4a) Of the above claim(s) is/are withdrawn from consideration.								
5)[	Claim(s) is/are allowed.								
6)⊠	Claim(s) <u>1-2,4-13,15-16</u> is/are rejected.								
7)	Claim(s) is/are objected to.								
8)□	Claim(s) are subject to restrict	ction and/or e	election requirement.						
Applicati	on Papers								
9)[	The specification is objected to by th	e Examiner.							
10)	10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.								
	Applicant may not request that any obje	ction to the dr	awing(s) be held in abey	ance. See 37 CFR 1.85(a).					
	Replacement drawing sheet(s) including	-	·		• •				
11)	The oath or declaration is objected to	by the Exar	miner. Note the attach	ed Office Action or form P	TO-152.				
Priority ι	ınder 35 U.S.C. § 119								
•	Acknowledgment is made of a claim ☐ All b)☐ Some * c)☐ None of:	for foreign p	riority under 35 U.S.C.	. § 119(a)-(d) or (f).					
	1. Certified copies of the priority documents have been received.								
	2. Certified copies of the priority								
	3. Copies of the certified copies	•		en received in this Nationa	l Stage				
	application from the Internation	-							
* \$	See the attached detailed Office action	n for a list of	the certified copies no	ot received.					
Attachmo-	tie)								
Attachmen  1) Notice	e of References Cited (PTO-892)		4) T Interview	v Summary (PTO-413)					
2) Notic	e of Draftsperson's Patent Drawing Review (F		Paper N	o(s)/Mail Date					
	nation Disclosure Statement(s) (PTO-1449 or r No(s)/Mail Date	PTO/SB/08)	5) ∐ Notice o 6) ⊠ Other: <u>d</u>	f Informal Patent Application (PT etailed action.	O-152)				

#### **DETAILED ACTION**

## Response to Amendment

This is a response to the amendment dated 8/8/05. The amendments to the specification and claims are acknowledged.

## Response to Arguments

1. Applicant's arguments filed 8/8/05 have been fully considered but they are not persuasive. Regarding "Independent claims 1 and 12 have been amended to recite at least one lumen extending from the distal end to the proximal end. A lumen extending from the distal end to the proximal end of the laminated waveguide is neither disclosed nor suggested by the cited prior art" on page 9: Primary reference to Hood, US Patent No. 5,935,143 clearly discloses a lumen 146' extending from the distal end to the proximal end in figure 8a.

#### Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1—2,4-13,15-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hood in US Patent No. 5,935,143 in view of Alexander in US Patent No. 2,784,751.

Hood teach a blade that is an ultrasonic waveguide (26) for transferring ultrasonic acoustic energy along a longitudinal axis of the ultrasonic waveguide, as recited in column 5,

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lines 55-67\*, an ultrasonic waveguide in an ultrasonic surgical instrument having an active tip end-effector which is placed in contact with tissue of a patient to couple ultrasonic energy transferred along the laminated ultrasonic waveguide to the tissue, as recited in column 2\*, and a connector (54) at a proximal end of the ultrasonic waveguide to transfer ultrasonic energy to the laminated ultrasonic waveguide, as recited in columns 8 and 9 and seen in figures 9-11.

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However, Hood does not explicitly recite a laminated ultrasonic waveguide having at least two stamped pieces of sheet stock which are laminated together to form a laminated ultrasonic waveguide; at least two of the stamped pieces of sheet stock are stamped to form at Ieast one channel extending along the length of the blade; a first outer, second inner and third outer stamped pieces of sheet stock which are laminated together; first and third outer laminated pieces of sheet stock that extend for a portion of the length of the blade and the second inner laminated piece of sheet stock extends for at least a portion of the length of the blade; first and second stamped half pieces of sheet stock which are laminated together, wherein each of the stamped first and second half pieces of sheet stock defines half of a cylindrical connector at a proximal end of the laminated ultrasonic waveguide', threads stamped into an interior surface of each half cylindrical connector, such that the first and second half pieces define a cylindrical connector having threads on the interior surface thereof for providing a threaded connector to the laminated ultrasonic waveguide, a distal portion of each of the stamped pieces of sheet stock has a longitudinal rib stamped therein extending along the longitudinal axis of the laminated ultrasonic waveguide to provide Iateral stiffness for the laminated ultrasonic waveguide, a second inner laminated piece of sheet stock that extend to a distal active tip end of the laminated ultrasonic waveguide; a second inner laminated piece forms an end-effector at the distal end of

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the ultrasonic laminated waveguide', a piece of sheet stock that is mounted and secured to longitudinally extending slots in an outer circumference of a separate threaded connector', or a method of fabricating a laminated blade via stamping and forming at least two stamped pieces of sheet stock to form pads of the body and laminating together the at least two stamped pieces of sheet stock to form the body of the blade.

On the other hand, Alexander teach a laminated blade having at Ieast two stamped pieces of sheet stock (20 and 21) which are laminated together to form a laminated blade, as recited in column 2, lines 14-50 and seen in figures 2 and 4., at Ieast two of the stamped pieces of sheet stock are stamped to form at Ieast one channel (24) extending along the length of the blade; a first outer, second inner and third outer stamped pieces (20 and 21) of sheet stock which are laminated together, first and third outer Laminated pieces of sheet stock that extend for a portion of the Length of the blade and the second inner laminated piece of sheet stock extends for at least a portion of the length of the blade, as seen in figure 2, and a method of fabricating a laminated blade via stamping and forming at Ieast two stamped pieces of sheet stock to form parts of the body and Laminating together the at least two stamped pieces of sheet stock to form the body of the blade, as recited in column 2, lines 14-50.

Therefore, it would be obvious to one with ordinary skill in the art to modify the invention of Hood to include an ultrasonic waveguide having at least two stamped pieces of sheet stock which are Laminated together to form a Laminated ultrasonic waveguide where at least two of the stamped pieces of sheet stock are stamped to form at least one channel extending along the Length of the blade', a first outer, second inner and third outer stamped pieces of sheet stock which are Laminated together', and first and third outer laminated pieces of sheet stock that

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extend for a portion of the Length of the blade and the second inner Laminated piece of sheet stock extends for at least a portion of the length of the blade, as taught by Alexander, for the purpose of ease of manufacture and reduction in cost, as recited in column 1, lines 25-30 of Alexander. The blade of Alexander is for a reciprocating saw where vibrations are expected. Therefore, it is within the scope of the invention to incorporate the teachings for a blade in an ultrasonic waveguide. Further, this modification would yield first and second stamped half pieces of sheet stock which are laminated together, wherein each of the stamped first and second half pieces of sheet stock defines half of a cylindrical connector at a proximal end of the laminated ultrasonic waveguide to be incorporated in the connector of Hood', and threads stamped into an interior surface of each half cylindrical connector, such that the first and second half pieces define a cylindrical connector having threads on the interior surface thereof for providing a threaded connector to the Laminated ultrasonic waveguide.

Moreover, it would be obvious to include at a distal portion of each of the stamped pieces of sheet stock, a longitudinal rib stamped therein extending along the longitudinal axis of the laminated ultrasonic waveguide to provide Iateral stiffness for the laminated ultrasonic waveguide since the modification to the ultrasonic waveguide would necessarily require more stability. Also, a piece of sheet stock that is mounted and secured to longitudinally extending slots in an outer circumference of a separate threaded connector and the method of fabricating a laminated blade via stamping and forming at least two stamped pieces of sheet stock to form pads of the body and laminating together the at least two stamped pieces of sheet stock to form the body of the blade also fall within the scope of the invention and would be obvious to one with ordinary skill in the art.

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### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shumaya B. Ali whose telephone number is 571-272-6088. The examiner can normally be reached on M-F 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Bennett can be reached on 571-272-4791. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shumaya B Ali

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